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Applicant:
Sabahattin Cakiral
Schwarzer Weg 9
64287 Darmstadt

Method and Device for Comparing the Properties of Products

Description

The invention relates to methods and devices for checking properties of wares and services. In particular, these are systems which enable the user to check the quality features and ingredients of products.

In the course of the ever increasing spread of allergies, consumers have the need to quickly and easily analyze what the consumer products contain. However, this is not always readily possible since only a small part and only the necessary substances are often shown on the packaging. Even if the ingredients are noted on the packaging, the consumer requires longer time to determine which ones are of concern to him.

The object of the invention is to provide a method and a device which enable the consumer to determine in best time whether the product meets his requirements.

This object is solved by the inventions according to the features of the independent claims. Advantageous embodiments of the inventions are described in the subclaims.

An important feature is a mobile terminal which can access exclusion and desired criteria by means of user identification, whereby the terminal has input capabilities, in particular a bar code reader, with reference to which the product properties can be determined by a central database. The two informations

can be compared either on the user device or on a central server. A further embodiment is provided for the Internet in which a simple interlinking and loading of information is used to obtain the desired result. Details are described below.

In particular, the present method for checking properties of wares and services comprises access to a first database in which standardized properties of wares and services are stored.

To enable access to these properties, the wares are provided with a unique product identification which is preferably a bar code. Other machine-readable identifications are also feasible. If the invention is to be applied via the Internet, then a unique link (URL) is the preferred variant. Preferably, the structuring of the information is group oriented, so that access to the information is quickly possible. The properties are input by the manufacturer or by the firm which distributes the products. Preferably, they are stored in XML. To ensure that there are no allocation difficulties, a number of ingredients are provided from which a subset is selected. This approach requires that the database system be continuously adapted and updated by new classes and particulars.

The method has a reading capability on a further database in which exclusion and desired criteria for wares and services can be accessed by means of a unique user identification. These criteria correspond to the criteria for the wares and services, as already described above. Here, the user can individually indicate by links which criteria he prefers or which ones he would like to avoid. It is pointed out that this is only one possible embodiment. In other embodiments, fuzzy terms and synonym lists can be used from which the information can be derived. It is also feasible to use interference algorithms which solve the problem posed. The noted criteria are maintained for groups or specific products or services by the user or templates can be provided which the user specially adapts. Thus, it is feasible that templates are provided for house dust allergies or other allergies which the user only has to incorporate in his individual profile. This profile is accessed by a unique user identification. The databases are

accessed after the user has marked a product or a service, preferably interactively, as a result of which the product identification is determined. This identification is used in a further step in which the user provides its unique user identification to determine exclusion and desired criteria as well as the properties of the wares and services on the basis of the product identification. In a further step, in which the criteria are compared with the properties, the user is advised of the result.

In a further embodiment, the user profiles are not stored on a central server, but locally on a mobile device. In this embodiment, Internet access to a local server is not required.

The mobile terminal is preferably connected via a wireless LAN or another network with a database in which the properties of wares and services are stored. The comparison step takes place either in the mobile device after transmission of the product properties or in a central or decentralized device which is situated in the network by providing the central or decentralized device with the exclusion and/or desired criteria. To record the product identification, the mobile device may have an optical reading device with which a bar code can be read.

If, on the other hand, a virtual unreal product is checked which is offered in the Internet, whereby the product identification is preferably configured as a unique link in the Internet, then access to the first database with the product identification is made possible by clicking. It is possible to generate cost information based on the corresponding signature of this link. The vendor has to provide this in the following.

The user identification is preferably provided by information stored on the client (computer or mobile terminal). However, it is also possible that a special window is opened in which the user can enter his code. The preferred variant is, however, a cookie which codes the user information. In this solution, the comparison operation can take place on a central server. However, it is also feasible that the required information is transmitted to the client who carries out the

comparison operations.

A further component of the present invention is a mobile user device for checking properties of wares and services which is preferably embedded in an infrastructure as described in the preceding methods. A product identification is read in or input via a reading or input unit. A user identification or the exclusion and desired criteria are stored in a storage area. The user identification and the product identification are sent to a central server via network access means. Via the identifications, the server has access to the properties of wares and services which he then compares with the exclusion and inclusion criteria. The latter are associated with the user identification. The result of the comparison is sent back and the result of the comparison is shown in a display unit, in particular the degree of agreement and/or deviation.

In a modified embodiment, the comparison is carried out on the mobile terminal, whereby either the exclusion and desired criteria are stored on the device or loaded via the network. On the other hand, the product properties are loaded by the network.

Inputting is preferably performed via a bar code reader or a keyboard. Pens which enable a handwriting identification are also feasible. The connection to a network preferably takes place by means of a wireless LAN, a GSM network or UMTS network.

A further component of the present invention is a software which implements the functionality on a conventional PDA. Reference is made to the claim for details. A further part of the invention is a data carrier which incorporates this software.

Another component of the invention is a server system which consists of several interlinked or a single server and which takes over the data management, in particular for the products and the user, and enables comparison operations.

The invention will be described in greater detail in the following with reference to examples of embodiments which are schematically illustrated in the drawings. Same reference numbers designate the same elements in the individual figures, which show in detail:

Fig. 1 a mobile terminal according to the invention which reads the information via a scanner in order to then transmit it over a wireless network and a further network to a central computer which has access to various databases in which the required information is stored;

Fig. 2 a device within the Internet according to the invention in which the corresponding databases are referenced by way of an area which is configured as a link and in which a cookie is stored on the user's computer.

Numerous variations and further developments of the described embodiments can be realized within the scope of the invention.

The preferred two embodiments are described in Figures 1 and 2.

Fig. 1 shows a mobile device 11, as it can e.g. also be configured in the form of a pen, with which a user 12 can check the ingredients of products 10, e.g. when shopping. The user identification is stored on the device 11, wherein in special cases also the profile, i.e. the exclusion and desired criteria, are stored. In this case, the latter are used for comparison on the terminal.

If, on the other hand, only the identifications are present, then both are transmitted to a central server 16 which has access to the databases 14 and 15. The properties of wares and services and the exclusion and desired criteria can be determined on these databases with reference to the identification. After the two pieces of information have been

determined, they are compared and the result is transmitted via the network 13 and the radio link to the terminal 11.

Fig. 2 shows an alternative embodiment in which the user is connected to the central server 16 via a client computer 17 and the Internet. A link area 19, which is shown in an enlargement of the screen, can be clicked on by a mouse 20, said clicking on causing a unique product identification to be sent to the server 16. In this way, the link area 19 represents a reference 22 to the information in the database 15. The reference 21 makes the connection of the user identification which is stored in a storage medium of the client computer 17 with the information in the database 14. The comparison operations can take place both on the client computer and on the server.